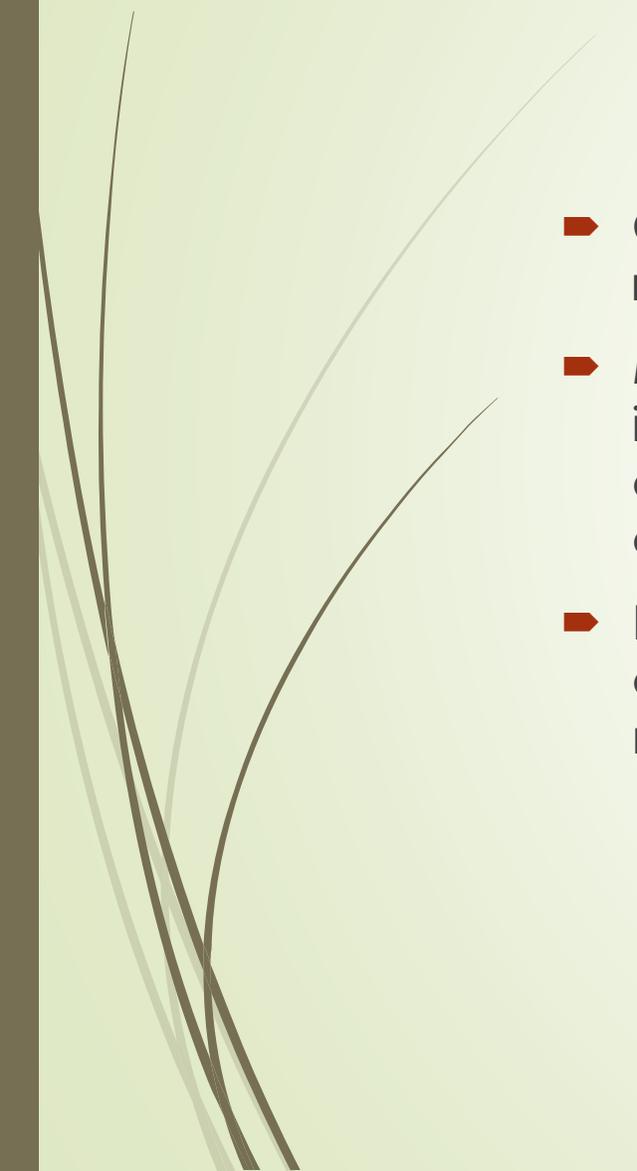# Using Risk Assessment Methodologies to Meet Management Objectives

D.L. DeMott

# Introduction

- Corporate and program objectives focus on desired performance and results.

- Management decisions that affect how to meet these objectives now involve a complex mix of: technology, safety issues, operations, process considerations, employee considerations, regulatory requirements, financial concerns and legal issues.

- Risk Assessments are a tool for decision makers to understand potential consequences and be in a position to reduce, mitigate or eliminate costly mistakes or catastrophic failures.

# Defining Management Risks

- Management Risk can be defined as - the possibility that an event will occur and unfavorably affect the accomplishment of stated goals and objectives.

- Different types of risks that can affect a project or company include:
  - Financial markets
  - Politics and public relations
  - Legal liabilities
  - Accidents
  - Weather and other natural disasters
  - Safety Issues
  - Regulatory / Government changes
  - Environmental concerns

# Defining a Risk Assessment

- Risk assessment is a systematic process for identifying and evaluating events that could affect achieving a goal or objective.

- A risk assessment should begin and end with a specific business objective associated with the identification of the potential conditions or barriers responsible not meeting the objective.

- Defined objectives provide a basis for measuring the impact and probability (usually identified as likelihood X consequence = risk)of risk ratings or rankings.

# Effective Risk Management Plans and Programs Include:

- An objective and systematic program to identify, understand and act to address risks including a method to evaluate the identified "risk" and it's consequences.

- A comprehensive plan for success that includes development, implementation, refinement and monitoring of effectiveness of the plan.

- Actions to ensure that Risk Management becomes an integral part of the decision making process.

- Responsibilities, training and methodology to identify risks on a continuous basis

# Risk Identification Includes:

| Safety Objectives (types of risk) | Program Risks Objectives (types of risks) | Factors to consider for Company or program risk generation |
| --- | --- | --- |
| Workers | Schedule | Industry and industry standards, |
| Facility | Budget | Risk tolerance |
| Environment | Public perception | Tasks, tools, and environment |
| Operations | | Type and availability of data |
| Public | | Industry views and requirements regarding risk & reliability |

# Effective Risk Management Plans and Programs Include (continued):

- Processes to communicate risk concerns and identification

- Risk owners

- Method for prioritization
  - Who is responsible for prioritization, who needs to agree?
  - What are the basis for the priorities (methodology)?
  - How risks will be addressed

- Action plans

# Analyze Risk

- Types of assessments include:
    - Qualitative assessments - generally subjective
    - Quantitative assessments  -  objective, data driven
- Select Methodology based on:
    - Cost and benefit
    - Fits the need
- Risk assessment as a management tool evolves and matures over time
- Benchmark and compare risk information across similar organizations
- Identify and understand risk causes to determine effective responses to minimize risks

# Plan and Implement Risk Responses

- Address Risk based on:
  - Consequences
  - Cost/benefit
  - Goals and objectives
- Options for management decisions
  - Avoidance
  - Minimization
  - Acceptance
- Measure the effects of your risk management efforts
- Continuously implement improvements
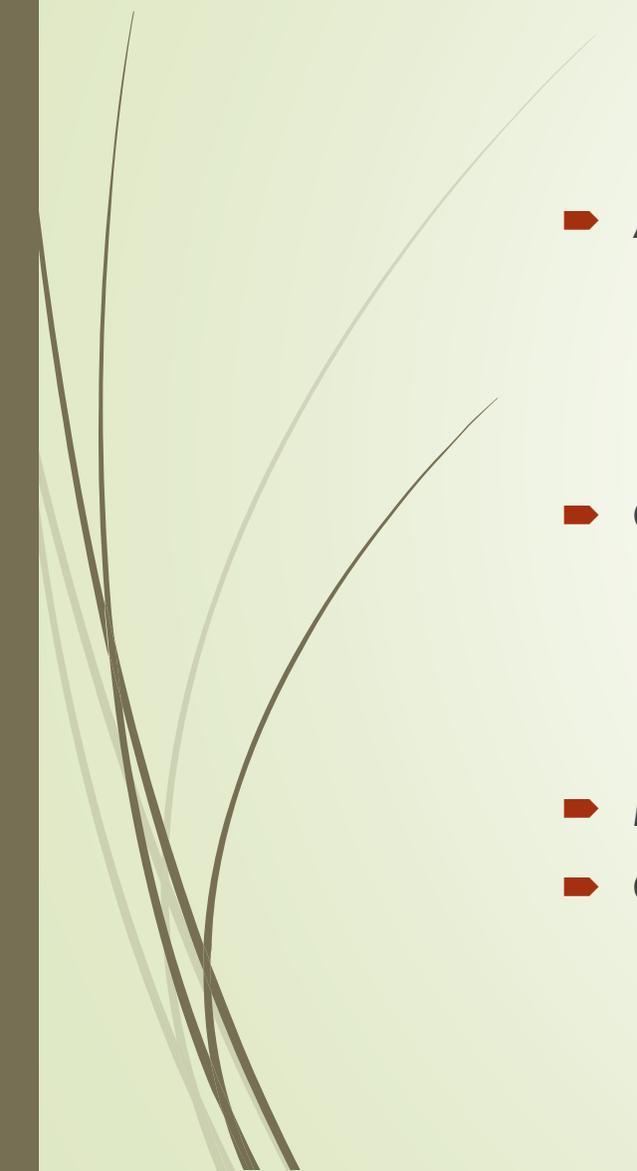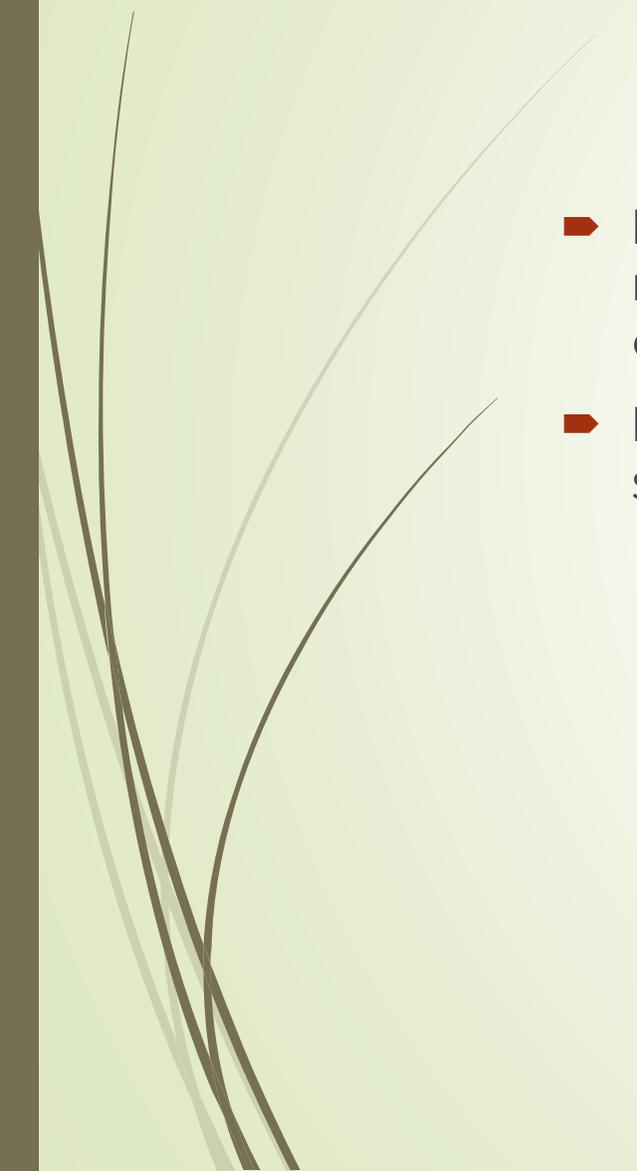
# Risk log/register should:

- Track Risks and Associated Tasks
- View progress & documents risk
- Focus on the current situation of each risk and identify changes
- Show responsibilities, due dates and actions
- Show or measure success

# Standards

- ISO 31000 provides an internationally recognized benchmark for risk management practices with sound principles for effective management and corporate governance.

- ISO/IEC 31010:2009 focuses on risk assessment concepts, processes and the selection of risk assessment techniques.

# Summary/conclusion

- Using a risk assessment methodology is only a starting point.

- A risk assessment program provides management with important input in the decision making process.

- A pro-active organization looks to the future to avoid problems, a reactive organization can be blindsided by risks that could have been avoided.

- You get out what you put in, how useful your program is will be up to the individual organization.